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Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

NGUYEN, TAN D

ART UNIT PAPER NUMBER

3629

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/820,457	Applicant(s) BORG ET AL.	
	Examiner Tan Dean D. Nguyen	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/13/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Status***

Claims 20-25 are cancelled. Claims 1-9, 10-15, 16-19 are pending and are rejected as followed.

Response to Arguments

1. In response to applicant's main argument, filed in 8/31/2005, that HARDMAN et al and KLINEFELTER et al is nonanalogous art, it has been held that a prior art reference must either be (1) in the field of applicant's endeavor or, if not, then be (2) reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both applications deal with electronic data collection, monitor, and problem identification (diagnostics) of a device using RFID tag system. The minor difference in these applications deal with the function (use for or intended use) of the device, HARDMAN et al deals with a vehicle or for transporting purpose while KLINEFELTER et al deals with printing purpose such as printer. However, the minor difference, function or application of the device, is not critical and within the skill of the artisan in the electronic memory tag communication technology to apply the same principle to various applications or various devices. Note that there is no positive citation of a printer in claim 1 nor any printing steps with respect to the printing device, i.e.,

(a) providing a printer used by a customer,

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(b) retrieving data from the component memory of a replaceable component of the printer, etc.

A "printing device" is a device that capable of printing. Note also, in an apparatus, the intended use has no patentable weight. A device is differentiated based on structures or elemental structures and not intended use. There is no citation in claim 1 that says that the device is printing images on a paper.

The examiner disagrees with applicant's assertion that HARDMAN et al deals with tire monitoring while KLINEFELTER et al deals with printer monitoring and they are non-related. Note also of other teachings in HARDMAN et al beside a tire tag as disclosed on [0309] and [0313] which discloses other elements, steps, methods and techniques that are insubstantially different from those described herein are also within the scope of the invention. To an engineer, the application of the same electronic data collection, monitor, and problem identification (diagnostics) of a device using RFID tag system to any devices of different functions, for printing, copying, moving, heating, cooling, calculating, etc., are within the skill of the artisan. In fact, the functions of the device are non essential and within the skill of the artisan to make minor adjustment to the specific device to carry out the main goal of electronic data collection, monitor, and problem identification (diagnostics) of a device using RFID tag.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-9 (method¹), 16-19 (method²), 10-15 (apparatus¹), 20-23, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over HARDMAN et al in view of KLINEFELTER et al or vice versa.**

Claim 1 is basically as followed:

A method, comprising:

(a) retrieving information/data from a memory item¹ (or component¹) (tag or memory tag), wherein the item is of a replaceable item² and wherein the item² is from a printing device used by a customer;

(b) storing the information/data in a database;

(c .) associating the information/data with the customer; and

(d) accessing the data in the database to assist the customer with solving problems related to the printing device (or device capable of printing).

Note that the preamble has no scope so the steps do not necessarily have the exact scope to be combinable. Note that in (a), the limitation of "printing device" on the term "data" is non-functional descriptive material and thus receive no patentable weight.

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There is no "printer" cited per say. There is no citation that the data containing information/data about printing operation. As for the phrase "wherein the item is of a replaceable item² ", this carried little patentable weight since it reads over "it belongs to" or "derived from". In other word, the replaceable item² or the printing device are not positively claimed and thus receiving little patentable weight.

Note that in (d), on the last line, the phrase "related to the printing device", the limitation "printing" receives very little patentable since it merely indicates the device is used for printing or capable of printing. There are elemental structures about the device to say that it's a printer not any steps to say it's a printer such "printing a document", etc. Note also in (d), the limitation of "assisting the customer with solving problems" is not positively claimed, but merely indicates the intended purpose or inherent result of the step "accessing the database.

HARDMAN et al fairly discloses:

A method comprising:

(a) retrieving information/data from a memory item¹ (tag or memory tag), wherein the item¹ is of a replaceable item² (i.e. a tire), and wherein the item² is from a device (i.e. vehicle) used by a customer {see Figs. 12, 25, [0107]}

(b) storing the information/data in a customer database {see Figs. 12, 25, [0108, 0111]}

(c) associating the information/data with the customer; {see Figs. 29, "User ID", "First name", "Telephone number", and [0145-0150]} and

(d) accessing the data in the customer database to identify problems or to assist the customer with solving problems related to the device {see Figs. 20, 23, 24, 25, 26, 31 "Editing Vehicle", [0003: "must be regularly maintained to maximize device efficiency", [0120: "transmit alarm signals when a parameter is out of range"; [0155], [0205: "function satisfactory within the specified load carrying capacity", and especially [0234: "need of service, ..., can be attended to immediately, "service can be directed to only problem tires and efficiency in service can be achieved. ... identification of problems early.. for evaluation.... to alarm personnel to the need for service to a particular tire], [0235: Fig. 20... an unacceptable condition illustrating that a problem has occurred with that tire]}.

Therefore, HARDMAN et al fairly discloses the claimed invention except for the difference in the function /capability of the device in step (d), i.e. printing, in "printing" device.

In a method and apparatus for communicating between a printer/printing device and supplies using electronic memory tag (Radio Frequency (RF) communication, KLINEFELTER et al teaches the retrieving of data from component memory (tag/memory tag) of a replaceable component (toner/ink cartridge) from a device (i.e. printing device) used by a customer {see Figs. 9, 7 or col. 5, line 5 to col. 6, line 61, col. 1, lines 5-18} for one of the purpose which is for diagnostics (careful (1) examination and (2) analysis of data/facts/symptoms in an attempt to (3) understand or (4) explain something, Webster's Dictionary) or reordering information {see col. 6, line 15}. It would have been obvious to a skilled artisan in the electronic memory tag (Radio

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Frequency (RF) communication technology to modify the process of HARDMAN et al by applying the same steps of electronic tag (Radio Frequency (RF)) communication management system/method to a printing device as taught by KLINEFELTER et al, which has a similar goal of communicating between a printer/printing device and supplies using electronic memory tag (Radio Frequency (RF) communication, as mere applying the same electronic memory tag (Radio Frequency (RF) communication of a replaceable components to other device to achieve similar device monitoring and problem solving results, absent evidence of unexpected results. Clearly, the mere applying the same essential retrieving, storing, associating and accessing the data steps from a memory tag of a replaceable component to/of any other device would have been obvious to a skilled artisan since the different functions of the device is not essential. No unexpected results have been shown with respect to the use other function of the device in data collection, monitoring and problem solving of HARDMAN et al.

Alternatively, it would have been obvious to modify the teachings of KLINEFELTER et al by carrying out the further steps of (b)-(d) as taught by HARDMAN et al above to identify problems and assist the customer with solving problems (diagnostics) related to the device as shown above. As indicated above, the type or different function of the device is not critical and the same RF communication management method and system can be used for any device that has replaceable component containing RF tag.

As for dep. claims 2-3 (part of 1), which deals with well known information/data parameters, i.e. type of information/data such as about the device and its usage, these are non-essential to the claimed invention and are fairly taught in HARDMAN et al /KLINEFELTER et al as shown in HARDMAN et al Fig. 31, [0119, 0145, 0149, especially **0265**, 0309 (mileage usage)]} or KLINEFELTER et al Fig. 9, col. 2, lines 38-50. Note that the selection of the type of information depends on the desired object/scope/monitoring parameter, etc. and is within the skilled of the artisan.

As for dep. claims 4 (part of 1), which deals with well known information/data parameter, i.e. type of information/data such as previously stored in a database, this is non-essential to the claimed invention and are fairly taught in HARDMAN et al /KLINEFELTER et al as shown in HARDMAN et al Figs. 31-33 or [0150-0150 "history data"/"Update history data"].

As for dep. claims 5-6 (part of 1), which deals with well known information/data parameter, i.e. features of the information/data previously stored in a database, these are non-essential to the claimed invention and are fairly taught in HARDMAN et al /KLINEFELTER et al as shown in HARDMAN et al Figs. 31-33 or [0150-0150 "history data"/"Update history data"]. Moreover, these are non-functional language limitation, i.e. "is derived", and carry no patentable weight.

As for dep. claim 7 (part of 1), which deals with well known device parameter, i.e. type of printer and component, these are non-essential to the claimed invention and are fairly taught in HARDMAN et al /KLINEFELTER et al as shown in KLINEFELTER et

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al col. 1, lines 7-18. The method can be any implemented in any type of printer {see col. 7, lines 63-67}.

As for dep. claim 8 (part of 1), which deals with associating certain rules (or specification or standard) to be followed, this is non-essential to the scope of the claimed invention and is fairly taught in HARDMAN et al /KLINEFELTER et al in view of HARDMAN et al [0224]. Moreover, this would have been obvious to a skilled artisan as mere applying other well known business parameters or variables since the selection of any well known business rules for compensation of irregular product or service would have been obvious, i.e. free replacement of product or service for malfunction within the 1st year of normally guaranteed performance. Note that no specific rules is cited, but just a rule so this appears to be non-essential since rules are inherently included in every business dealings.

As for dep. claim 9 (part of 1), which deals with other step for testing the replaceable item² (component²) for defect and storing the information, this is non-essential to the claimed invention and is fairly taught in HARDMAN et al / KLINEFELTER et al by HARDMAN et al in [0226 "*pressure measurements are taken*"], [0227]-[0235]]. Furthermore, this dep. claim does not has any patentable weight since it does not further limit the "retrieving data from a component¹/ item¹ memory (tag memory)" of step (a) or steps (a)-(e)? How does it further modifies the "retrieving" step?

As for Independent Method² claim 16, which is similar to claim 1 with a preamble as shown in step (d) of 1, It's rejected for the same reason set forth in claim 1 above. As for the limitation of viewing the compiled data to resolve a problem the

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customer is having, this is taught in HARDMAN et al Figs. 29, 30, 31, 32 or [0261] of Web browser screens showing how a user can access the item data and tag or monitoring parameters. KLINEFELTER et al does not appear to teach this viewing limitation. It would have been obvious to modify the teaching of KLINEFELTER et al to include to the limitation of viewing the compiled data as taught by HARDMAN et al to obtain well known benefits of the Internet "Web browser screens" such as availability, convenience, etc. and ability to set certain monitoring parameters. See HARDMAN et al [0261].

As for dep. claims 17, 19 (part of 16), which deals with storing customer information and associating the customer information, these are fairly taught in HARDMAN et al [0142-0146], Figs. 29-32 or KLINEFELTER et al Fig. 9.

As for dep. claim 18 (part of 16), which deal with well known customer information collecting parameters, i.e. from a registration card that register the customer as the purchaser of the device, this is well known practice and admitted by applicant in the background of the invention, specification page 1, lines 15-21. Clearly, it would have been obvious to include this user information in the database as taught by HARDMAN et al on Figs. 27-33 or KLINEFELTER et al Fig. 9 in order to include as much information as possible using whatever possible old or new ways.

As for Independent Apparatus¹ claim 10, HARDMAN et al discloses a system comprising:

(a) a center to receive a used device replaceable component (tire) from a device of a customer, the component including memory tag integrated therewith; {see 0107, 0119, Fig. 12}}

(b) a customer database that stores customer information for multiple customers, including device and component used by the customers; {see Fig. 12, [0109, 0110, 0139]}

(c) a data transfer center wherein the data is retrieved from the component memory and stored in the customer database; and {see 0119, Fig. 12}

(d) customer center configured to provide access to the customer database so that the operator can view the device data {see 0150, Figs. 23-30}.

As for the limitation of a recycling center, this is fairly taught in [0119] wherein a tire shop or dispatch can function as recycling center. Moreover, this limitation is merely recites the function of the center which carries no patentable weight and no elemental structures with respect to the "recycling" function or "printing device" have been shown. HARDMAN et al fairly teaches the method of claim 10 except for the function of the device, i.e. printing device (or printer) and (d) customer service center configured to receive calls from the customer.

In a method and apparatus for communicating between a printer/printing device and supplies using electronic memory tag (Radio Frequency (RF) communication, KLINEFELTER et al teaches the retrieving of data from component memory (tag/memory tag) of a replaceable component (toner/ink cartridge) from a device (i.e. printing device) used by a customer {see Figs. 9, 7 or col. 5, line 5 to col. 6, line 61, col.

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1, lines 5-18} for diagnostics or reordering information {see col. 6, line 15}. It would have been obvious to a skilled artisan in the electronic memory tag (Radio Frequency (RF) communication technology to modify the process of HARDMAN et al by applying the same steps of electronic tag (Radio Frequency (RF)) communication management system/method to a printing device as taught by KLINEFELTER et al, which has a similar goal of communicating between a printer/printing device and supplies using electronic memory tag (Radio Frequency (RF) communication, as mere applying the same electronic memory tag (Radio Frequency (RF) communication of a replaceable components to other device to achieve similar communication results. Clearly, the mere applying the same essential retrieving, storing, associating and accessing the data steps from a memory tag of a replaceable component to/of any other device would have been obvious to a skilled artisan since the type or different function of the device is not critical and any device can be used.

As for the limitation of (d) customer service center configured to receive calls from the customer, this is well known business practice to improve business performance by receiving feedback from the customer as shown in Applicant's Background, pages 1-3, and would have been obvious to implement this practice in HARDMAN et al /KLINEFELTER et al to improve business performance.

As for dep. claims 11, 12 (part of 10), which have similar limitations as in dep. claims 3, 2 respectively above, they are rejected for the same reasons set forth in claims 3 and 2 above.

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As for dep. claims 13, 14 (part of 10), which have similar limitations as in dep. claim 9 above, they are rejected for the same reasons set forth in claim 9 above.

As for dep. claim 15 (part of 10), which have similar limitations as in dep. claim 7 above, they are rejected for the same reasons set forth in claim 7 above.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct@uspto.gov>. Should you have any questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

In receiving an Office Action, it becomes apparent that certain documents are missing, e. g. copies of references, Forms PTO 1449, PTO-892, etc., requests for copies should be directed to Tech Center 3600 Customer Service at (571) 272-3600, or e-mail CustomerService3600@uspto.gov.

Any inquiry concerning the merits of the examination of the application should be directed to Dean Tan Nguyen at telephone number (571) 272-6806. My work schedule is normally Monday through Friday from 6:30 am - 4:00 pm. I am scheduled to be off every other Friday.

Should I be unavailable during my normal working hours, my supervisor John Weiss may be reached at (571) 272-6812. The FAX phone numbers for formal communications concerning this application are (703) 872-9306. My personal Fax is (571) 273-6806. Informal communications may be made, following a telephone call to the examiner, by an informal FAX number to be given.

dtn
Jan. 2006


DEANT.NGUYEN
PRIMARY EXAMINER